

EU POPs Regulation

Joint Statement on the Proposed UTC Value for PBDEs

26 January 2024

The undersigned associations support the general objective of the Stockholm Convention to eliminate Persistent Organic Pollutants and its EU Implementation under the POP Regulation. This Convention and Regulation safeguard human health and the environment from the harmful effects of these substances.

This position paper outlines the joint industry position on the ongoing Unintentional Trace Contaminant (UTC) revision of the polybrominated diphenyl ethers (PBDEs) substance group.

General impacts from lowering the limit value below 500mg/kg (ppm)

On 24 November 2022, the EU Commission presented its intention, during the POP Expert Group meeting, to lower the existing UTC threshold for PBDEs from 500mg/kg to 350mg/kg with a potential further reduction to 200mg/kg two years after entry into force.

In response, the plastics recycling industry published a [joint statement](#) highlighting the heterogenous and complex nature of source WEEE plastics material. The statement emphasised the absence of validated standards related to sampling and measurements, leading to substantial variations between different analyses. This variability has been observed not only in the actual practices of specialised WEEE plastics recyclers, but also in the findings of [PRIMUS](#), an ongoing EU funded project.

The joint statement also detailed the risks and consequences that a lower threshold poses to the plastics recycling industry. These include:

1. **Discouraging investments:** The differing and constantly changing legal thresholds create uncertainty, thus discouraging investments in increased recycling capacity. Given that the typical permitting application process for operational changes can span several years, alterations to limit values during the application phase can further extend approval timeframes. They could also result in the withdrawal of a new project, or even deter investors from considering such ventures in the first place.
2. **Loss of material:** Large quantities of plastics will have to be incinerated or sent for disposal instead of recycling and recovery, deviating from the waste hierarchy and the core principles of a circular economy. The additional impact that must be considered is the availability (or lack thereof) of appropriate incineration or disposal capacity in every Member State.
3. **Halt innovation:** Currently, only five different polymers are recovered from WEEE, and ongoing efforts from the recycling industry focus on developing techniques to recover additional polymers from this mix. The proposed reduction in PBDE thresholds may hinder these innovative practices, slowing

down and most likely halting progress in recovering other types of polymers from WEEE plastics.

4. **Increase in illegal activity:** A lower threshold for PBDEs is anticipated to lead to an upsurge in undocumented flows of WEEE plastics, including illegal exports.

POP CA proposals for even stricter rules that restricts recycling markets

On 29 November 2023, the POP Expert Group reconvened to re-discuss the proposal and present the different positions shared by both Members States and Industry associations. During the in-question meeting, the EU Commission presented the following two new approaches:

1. Approach aiming at creating a PBDE-free market for consumer products:

- ❖ For products for the general public or products that can be used by the general public: **UTC limit value of 10 ppm**
- ❖ For other products: UTC limit value as of entry into force of the delegated act, UTC limit value of **350 ppm as of 30 December 2025** and **200 ppm as of 30 December 2027** (i.e. in line with Annex IV content limits)

Concerns on option No1.

Option 1 aims to create a PBDE-free market with a UTC limit value of 10 ppm for products accessible to the general public. However, this proposal raises concerns regarding the viability of recycling markets for plastics from WEEE and ELV. Implementing a 10ppm threshold for recycled materials (mixtures) intended for general public use, effectively implies a de facto prohibition on the use of recycled plastics from WEEE and ELVs across most markets.

It's noteworthy to highlight that the 10ppm threshold was previously discussed in 2018/2019, resulting in the conclusion that it hinders recycling due to being impractical and unmeasurable.

2. Approach taking into account recycling

- ❖ For PBDE-containing recyclate mixtures: UTC limit value of 500 ppm as of entry into force, 350 ppm as of 30 December 2025 and 200 ppm as of 30 December 2027 (i.e. in line with Annex IV content limits)
- ❖ For mixtures and articles made from or containing PBDE-containing recyclates: 250 ppm as of entry into force, 175 ppm as of 30 December 2025 and 100 ppm as of December 2027 (50% recyclate in mixtures or articles + same timeline as Annex IV)
- ❖ For mixtures and articles: UTC limit value of 10 ppm

Concerns on option No2.

The signatories to this statement would like to point out that point 2 and 3 of this option are contradictory to the objectives of the new Circular Economy Action Plan (CEAP). While the aim of the new CEAP is to promote the use of recycled materials (such as recycled plastics from WEEE and ELV), the above-mentioned proposals will undoubtedly decrease it.

Many products placed on the EU market are currently made with 100% recycled plastics (e.g., ballpoint pens, internet routers etc.,).

Alternatively, the proposed measures, particularly the 50% reduction in the market for recycled materials, would significantly impact on these products. This raises questions about the feasibility and practical enforceability of such proposals, further adding to the existing uncertainties faced by the technical plastics recycling industry.

Conclusions and recommendations

The specialised WEEE plastics recycling industry, which has significantly evolved since the introduction of the WEEE Directive, plays a crucial role, not only in saving large quantities of fossil resources (i.e., CO₂ savings) through the mechanical recycling of these WEEE tech-plastics, but as research has shown¹, also contributes to substantial energy savings. Recovered plastics are produced with less energy compared to what would have been otherwise required for producing virgin tech-plastics.



The new and innovative recycling industry for the recovery and reuse of plastics requires legal clarity and stability for its development.

Given how plastic waste containing PBDEs is treated in a recycling facility, we strongly believe that mechanical recycling is the optimal approach to ensure proper sorting and destruction. Consequently, the limits set in the POPs Regulation should facilitate mechanical recycling as a solution for the management of plastics containing PBDEs, aligning with the transition to a circular economy.



The absence of accurate scientific and validated screening methods suitable for industrial volume-based continuous operations hinders recyclers from providing the certainty and assurance required by their clients regarding the compliance of recovered materials with UTC values lower than 500 ppm.

In the foreseeable future, it is imperative to maintain the Annex I threshold for PBDEs at 500 ppm. This should be accompanied by adapted standards and guidance for sampling, scientific and validated screening of the recovered plastics to demonstrate compliance of their product with EU chemicals legislation. Any reduction in UTC Limits should be accompanied by an impact assessment, considering the measurability of the limit and related uncertainty, evaluating environmental benefits and drawbacks, and conducting a socio-economic analysis.

Overall, we call for:



- ***Setting the following limits for PBDE-containing recyclate mixtures and articles manufactured thereof: 500 ppm after adoption, 200 ppm as of 1 January 2030².***
- ***For non-recyclate containing mixtures and articles: 10 ppm after adoption***

¹ <https://www.mgg-recycling.com/wp-content/uploads/LCA-MBA-Polymers-Austria.pdf>

² This timeline takes into consideration the distribution around the average E&E service life of 8 years. However, it should be noted that for certain applications (e.g. screens) this is a severe underestimation and with efforts at the Member State level to promote, reuse, repair, and refurbishment; the average service life and its standard deviation is expected to increase. Lastly, the work being done under the EU PRIMUS Project shows that guaranteeing 200 ppm is already challenging and 10 ppm virtually impossible.



FEAD is the European Waste Management Association, representing the private waste and resource management industry across Europe, including 18 national waste management federations and 3,000 waste management companies. Private waste management companies operate in 60% of municipal waste markets in Europe and in 75% of industrial and commercial waste. This means more than 320,000 local jobs, fuelling €5 billion of investments into the economy every year.



Plastics Recyclers Europe is an organization representing the voice of the European plastics recyclers who reprocess plastic waste into high-quality material destined for production of new articles. Recyclers are important facilitators of the circularity of plastics and the transition towards the circular

economy. Plastics recycling in Europe is a rapidly growing sector representing over €8.7 billion in turnover, 11.3 million tonnes of installed recycling capacity, more than 730 recycling facilities, and over 30.000 employees.



The European Recycling Industries' Confederation (EuRIC) is the umbrella organisation for the recycling industries in Europe. Through its 75 members from 23 European countries, EuRIC represents more than 5,500 large companies and SMEs involved in the recycling and trade of various resource streams. They represent a contribution of 95 billion EUR to the EU economy and 300,000 green and local jobs.

By turning waste into resources, recycling reintroduces valuable materials into value chains over and over again. By bridging circularity and climate neutrality, recyclers are pioneers in leading Europe's industrial transition.